

CLAIMS

1. A method of controlling the load in a mobile communication system in a system in which the mobile stations comprise means for utilizing discontinuous transmission, **characterized** in that

5 at least one mobile station is equipped with regulation means for regulating its parameters related to discontinuous transmission, and

a control signal is transmitted via a radio path to said at least one mobile station for regulating its parameters related to discontinuous transmission in such a manner that the mobile station transmits telecommunication signals to the other parts of the system more seldom or more often than before.

2. A method as claimed in claim 1, **characterized** in that the control signal is selected in such a manner that said control means regulate at least those parameters related to discontinuous transmission on the basis of which the mobile station can discriminate between speech conveyed to a microphone and background noise in such a manner that the mobile station interprets the noise arriving at the microphone as background noise more easily than before.

3. A method as claimed in claims 1 or 2, **characterized** in that the traffic load in different parts of the mobile communication system is monitored, and said control signal is transmitted to certain mobile stations or mobile stations in a certain area, when the traffic load in some part of the system exceeds a predetermined limit, whereby said mobile stations that have received the control signal regulate their parameters related to discontinuous transmission in such a manner that they transmit telecommunication signals to the other parts of the system more seldom than before.

4. A mobile communication system comprising
a mobile exchange (MSC),
base stations (BTS1, BTS2) in data transmission connection to the
mobile exchange, and
mobile stations (MS1 to MS5) in a radio connection to the base stations and comprising means for utilizing discontinuous transmission, **characterized** in that the system comprises
monitoring means (1) for monitoring the load in different parts of the
system,
control means (BTS1, BTS2) responsive to the monitoring means

for transmitting, via a radio path, a control signal (CNT) to certain mobile stations (MS1 to MS5) or mobile stations in a certain area, when the monitoring means (1) indicate that the traffic load in some part (L2) of the system exceeds a predetermined limit, and

5 mobile stations (MS1 to MS5) comprising regulation means (5) for regulating their parameters related to discontinuous transmission in response to receiving the control signal in such a manner that said mobile stations transmit telecommunication signals to the other parts of the system more seldom or more often.

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10 5. A mobile communication system as claimed in claim 4, **characterized** in that the monitoring means (1) are arranged to monitor the amount of the free traffic capacity of the data transmission connection (L1, L2) between at least one base station (BTS1) and mobile exchange (MSC) belonging to the system, whereby the control means (BTS1) are arranged to
15 transmit said control signal (CNT) to all those mobile stations (MS1 to MS3) from which a traffic connection is in progress via said base station, when the control means indicate that the free traffic capacity is below the predetermined limit value.

20 6. A mobile communication system as claimed in claim 5, **characterized** in that said data transmission connection (L1, L2) between the base station (BTS1) and the mobile exchange (MSC) is a packet switched data transmission connection.

25 7. A mobile communication system as claimed in claim 4, **characterized** in that the monitoring means (1) are arranged to monitor the amount of the free traffic capacity of a certain base station (BTS1), whereby the control means (BTS1) are arranged to transmit said control signal (CNT) to all those mobile stations (BTS1 to BTS3) from which a traffic connection is in progress via said base station (BTS1), when the free traffic capacity is below the predetermined limit value.

30 8. A mobile communication system as claimed in claim 4, **characterized** in that the monitoring means (1) are arranged to monitor the quality of the traffic channels of a certain base station, whereby the control means are arranged to transmit said control signal (CNT) to all those mobile stations (MS1 to MS3) from which a traffic connection is in progress via said
35 base station, when the quality of the traffic channels is below a predetermined limit.

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regulation means (5), responsive to the detection means (4), for changing said parameters utilized in speech detection in such a manner that the signal processing means interpret the voice signals received through the user interface (3) as background noise more seldom or more often than before.

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